

REBECCA DERSIMONIAN, Sc.D.  
CURRICULUM VITAE

EDUCATION

<u>Dates</u>	<u>School</u>	<u>Major</u>	<u>Degree</u>
1970-1974	Brandeis University	Biology	A.B.
1978-1980	Harvard University	Biostatistics	S.M.
1980-1983	Harvard University	Biostatistics Pathology (Minor)	Sc.D.

ACADEMIC AND PROFESSIONAL APPOINTMENTS

1999-Present	Mathematical Statistician National Institute of Allergy and Infectious Diseases (NIAID)
1990-1999	Mathematical Statistician National Institute of Child Health and Human Development (NICHD)
1984-1990	Assistant Professor of Public Health Yale University School of Medicine

OTHER APPOINTMENTS AND TRAINING

1999 - 2000	Leadership Cadre Program National Institutes of Health
1988 & 1993	Fulbright Teaching Scholar Erevan State University, Armenia
1983-1984	Post Doctoral Fellow (Biostatistics) University of North Carolina at Chapel Hill
1978-1983	Teaching and Research Fellow (Biostatistics) Harvard University School of Public Health
1975 - 1978	Research Assistant (Cell Biology) Massachusetts General Hospital

## COMMITTEE AND ADVISORY APPOINTMENTS

1986 - 1990	Member, Academic Progress Committee Yale University School of Public Health
1991 - 1995	Member, Steering Committee, NICHD study on Calcium Supplementation for the Prevention of Preeclampsia in Pregnancy
1995	Member, <u>Ad Hoc</u> Committee NICHD Flexible Workplace Program
1995 - 1998	Member, Women Scientist Advisory Committee National Institutes of Health
1997 - 1998	Member, Search and Promotion Committee Division of Epidemiology, Statistics, and Prevention Research, NICHD
1995 - 1999	Member, Data and Safety Monitoring Board for the "Pride in Parenting Protocol" of the NIH-DC Initiative
1998 - 1999	Member, Data and Safety Monitoring Board for the WHO Trial of Misoprostol in the Management of the Third Stage of Labour
2000 - Present	Executive Secretary, HIV Therapeutic Trials Data and Safety Monitoring Boards, NIAID
2002	Technical Reviewer of Proposals Submitted in Response to RFP # AA 02-04: "Estimating the Alcohol-Attributable Fraction for U.S. Morbidity and Mortality Based on Meta- Analysis of Epidemiologic Studies", NIAAA

## INVITED PRESENTATIONS (Selected)

"Reporting on Methods in Clinical Trials"  
Beth Israel Hospital, Boston (1982)

"Statistical Methodology in Clinical Research".  
The Princeton Conference, Atlantic City (1985)

"Meta-Analysis in Clinical Trials"  
Stanford University, Palo Alto (1986)

"Issues in Combining Evidence from Comparative Clinical Trials"  
Mount Sinai School of Medicine, New York (1989)

"Longitudinal Data Analysis"  
Erevan State University, Armenia (1993)

"Meta-analysis in the Design and Monitoring of Clinical Trials"  
National Institutes of Health, Bethesda (1994)

"Heterogeneity and Related Issues in Meta-analysis"  
Food and Drug Administration, Rockville (1995)

"Trials of Calcium for the Prevention of Preeclampsia"  
10-Th World Congress: International Society for the  
Study of Hypertension in Pregnancy, Seattle (1996)

"Reflections at the 50-th Anniversary of Harvard Biostatistics"  
Anniversary Celebration of the Biostatistics Department  
Harvard School of Public Health, Memphis (1997)

"Meta-Analysis in Social Sciences" Panel Discussant -- Workshop  
sponsored by the Institute for the Advancement of Social Work  
Research (2004)

"Heterogeneity in Meta-Analysis of Clinical Trials"  
Third World Conference on Computational Statistics  
and Data Analysis, Limassol, Cyprus (2005)

## PUBLICATIONS

**DerSimonian R**, Charette LJ, McPeck B, and Mosteller F.  
"Reporting on Methods in Clinical Trials". The New England Journal of Medicine, 306: 1332-1337, 1982.

Laird N, and **DerSimonian R**. "Issues in Combining Evidence from several Comparative Trials of Clinical Therapy". In: Proceedings of the XIth International Biometric Conference, 1982.

**DerSimonian R**, and Laird N. "Evaluating the Effectiveness of Coaching on SAT Scores: A Meta-Analysis". Harvard Educational Review, 53: 1-15, 1983.

**DerSimonian R**, and Laird N. "Meta-Analysis in Clinical Trials". Controlled Clinical Trials, 7: 177-188, 1986.

**DerSimonian R**. "Maximum Likelihood Estimation of A Mixing Distribution". Journal of The Royal Statistical Society, Series C, 35: 302-309, 1986.

Vlock DR, **DerSimonian R**, and Kirkwood JM. "Prognostic Role of Antibody Reactivity to Melanoma". Journal of Clinical Investigation, 77: 1116-1121, 1986.

**DerSimonian R**. Comment on "Empirical Bayes Confidence Intervals Based on Bootstrap Samples". Journal of The American Statistical Association, 82: 755-756, 1987.

**DerSimonian R**, and Baker S. "Two-Process Models for Discrete-Time Serial Categorical Response". Statistics in Medicine, 7: 965-974, 1988.

Murtaugh CM, Cooney LM, **DerSimonian R**, Smits HL, and Fetter RB. "Nursing Home Reimbursement and the Allocation of Rehabilitation Therapy Resources". Health Services Research, 23: 467-493, 1988.

**DerSimonian R**. Editorial: "Combining Evidence from Clinical Trials". Anesthesia and Analgesia, 70: 475-476, 1990.

**DerSimonian R**. Editorial: "Parenteral Nutrition with Branched-Chain Amino Acids in Hepatic Encephalopathy: Meta-Analysis". Hepatology, 11: 1083-1084, 1990.

Flanders WD, **DerSimonian R**, and Rhodes P. "Estimation of Risk Ratios in Case-Base Studies with Competing Risks". Statistics in Medicine, 9: 423-435, 1990.

Legnini MW, Thompson JD, **DerSimonian R**, and Lynch JT. "Recent Changes in Connecticut Hospital Use Rates: Have Small-Area Variations Been Affected?". Inquiry, 27: 51-60, 1990.

Baker SG, Rosenberger WF, and **DerSimonian R**. "Closed-Form Estimates for Missing Counts in Two-Way Contingency Tables". Statistics in Medicine, 11: 643-657, 1992.

Levine RJ, Raymond E, **DerSimonian R**, and Clemens JD. "Preeclampsia Prevention with Calcium Supplementation". Clinics in Applied Nutrition, 2: 30-38, 1992.

Duray PH, **DerSimonian R**, Barnhill R, Stenn K, Ernstoff MS, Fine J, and Kirkwood JM. "An Analysis of Inter-Observer Recognition of the Histopathologic Features of Dysplastic Nevi from a Mixed Group of Nevomelanocytic Lesions". Journal of the American Academy of Dermatology, 27: 741-749, 1992.

Flanders WD, **DerSimonian R**, and Freedman DS. "Interpretation of Linear Regression Models That Include Transformations or Interaction Terms". Annals of Epidemiology, 2: 735-744, 1992.

**DerSimonian R**, Clemens J, Spirtas R, and Perlman J. "Vasectomy and the Risk of Prostate Cancer: Methodological Review of the Evidence". Journal of Clinical Epidemiology, 46: 163-172, 1993.

Strickler H, Hoover DR, and **DerSimonian R**. "Problems in Interpreting HIV Sentinel Seroprevalence Studies". Annals of Epidemiology, 5: 447-454, 1995.

**DerSimonian R**. "Meta-Analysis in the Design and Monitoring of Clinical Trials". Statistics in Medicine, 15: 1237-1248, 1996.

Levine RJ, Esterlitz JR, Raymond EG, **DerSimonian R**, et al. "The Trial of Calcium for Preeclampsia Prevention (CPEP): Rationale, Design, and Methods". Controlled Clinical Trials, 17: 442-469, 1996.

Levine R, and **DerSimonian R**. Letter to the Editor: "Effect of Calcium Supplementation on Pregnancy-Induced Hypertension and Preeclampsia: A Meta-analysis". Journal of the American Medical Association, 276: 1387, 1996.

**DerSimonian R**, and Clemens J. "Does Vasectomy Cause Cancer?" Chance, 10: 12-14, 1997.

Levine R, Hauth J, Curet L, Sibai B, Catalano P, Morris C, **DerSimonian R**, et al. "Trial of Calcium to Prevent Preeclampsia". The New England Journal of Medicine, 337:69-76, 1997.

Klebanoff M, Levine R, and **DerSimonian R**. Letter to the Editor: "Large Trials versus Meta-analysis of Smaller Trials". Journal of the American Medical Association, 277: 376-377, 1997.

Klebanoff M, Levine R, **DerSimonian R**, Clemens J, and Wilkins DG. "Serum Caffeine and Paraxanthine as Markers for Reported Caffeine Intake in Pregnancy". Annals of Epidemiology, 8:107-111, 1998.

Klebanoff M, Levine R, Clemens J, **DerSimonian R**, and Wilkins DG. "Serum Cotinine Concentration and Self-reported Smoking during Pregnancy". American Journal of Epidemiology, 148: 259-262, 1998.

Brenner R, Overpeck M, Trumble A, **DerSimonian R**, and Berendes H. "Deaths Attributable to Injuries in Infants, United States, 1983-1991". Pediatrics, 103: 968-974, 1999.

Zhang J, Klebanoff MA, and **DerSimonian R**. "Epidural Analgesia in Association with Duration of Labor and Mode of Delivery: A quantitative review". American Journal of Obstetrics and Gynecology, 180: 970-977, 1999.

**DerSimonian R**. Letter to the Editor: "Conference on Meta-analysis and Monitoring of Clinical Trials". Statistics in Medicine, 18: 753-754, 1999.

Mills JL, DerSimonian R, Raymond E, Morrow J, et al. "Prostacyclin and Thromboxane Changes Predating Clinical Onset of Preeclampsia: A Multicenter Prospective Study". JAMA, 282: 356-362, 1999.

**DerSimonian R**, and Levine R. "Resolving Discrepancies between a Meta-analysis and a Subsequent Large Controlled Trial". JAMA, 282: 664-670, 1999.

Klebanoff M, Levine R, **DerSimonian R**, Clemens J, and Wilkins D. "Maternal Serum Caffeine Metabolites and the Risk of Spontaneous Abortion". NEJM, 341: 1639-1644, 1999.

Henderson C, Ownby D, Trumble A, and **DerSimonian R**. "Predicting Asthma Severity from Allergic Sensitivity to Cockroaches in Pregnant Inner City Women". Journal of Reproductive Medicine, 45: 337-340, 2000.

Ramsey M, **DerSimonian R**, Holtel M, and Burgess L. "Corticosteroid Treatment for Idiopathic Facial Nerve Paralysis: A Meta-analysis". The Laryngoscope, 110: 335-341, 2000.

Anthony K, Yoder C, Metcalf J, **DerSimonian R**, Orenstein J, Stevens R, Falloon J, Polis M, Lane C, and Sereti I. "Incomplete CD4 T Cell Recovery in HIV-1 Infection after 12 Months of Highly Active Antiretroviral Therapy (HAART) is Associated with Ongoing CD4 T Cell Activation and Turnover". JAIDS, 33: 125-133, 2003.

**DerSimonian R**, and Kacker R. "Random-Effects Model for Meta-analysis of Clinical Trials: An Update". Contemporary Clinical Trials, 28: 105-114, 2007.

Sereti I, Sklar P, Ramchandani MS, Read SW, Aggarwal V, Imamichi H, Natarajan V, Metcalf JA, Joseph A. Kovacs JA, Tavel J, Davey RT, **DerSimonian R**, and Lane HC. "CD4<sup>+</sup> T Cell Responses to Interleukin-2 Administration in HIV-Infected Patients Are Directly Related to the Baseline Level of Immune Activation". The Journal of Infectious Diseases, 196: 677-683, 2007.

#### BOOK CHAPTERS

Louis TA, and DerSimonian R. "Health Statistics Based on Discrete Population Groups". In: Regional Variations in Hospital Use. Rothberg DL, ed. Toronto: Lexington Books, D.C. Heath and Company, 1982.

DerSimonian R, and Laird N. "Evaluating the Effectiveness of Coaching on SAT Scores: A Meta-Analysis". In: Essays on Educational Research. Hauser-Cram P, and Martin FC, eds. Cambridge: Harvard Educational Review, 1983.

DerSimonian R, Charette LJ, McPeck B, and Mosteller F. "Reporting on Methods in Clinical Trials". In: Medical Uses of Statistics (2nd Edition). Bailer JC, and Mosteller F, eds. Boston: New England Journal of Medicine Books, 1992.

## BOOK REVIEWS

DerSimonian R. "Analyzing Effect Sizes: Random Effects Models" (S. Raudenbush). In: Handbook of Research Synthesis. Cooper HM and Hedges LV, eds. New York: Russell Sage Foundation, 1994.

DerSimonian R. "Systematic Reviews". Chalmers I, and Altman D, eds. Statistics in Medicine, 16: 2930, 1997.